

SOME NEW NORTH AMERICAN CERAMBYCIDAE

(Coleoptera)

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The following species of *Callidium*, *Phymatodes* and *Megacyllene* are described at this time in order to make the names available for other studies.

***Callidium powelli* Linsley and Chemsak, new species**

Male—Body small, elytra narrowly explanate behind humeri, subparallel; upper surface blue to violet-blue, pronotum often greenish, appendages and underside black, slightly metallic. *Head* densely, deeply, contiguously punctate, moderately clothed with thin, erect, dark hairs; antennae extending to about middle of elytra, black, segments narrow. *Pronotum* about 1½ times wider than long, narrower than elytra at base; sides broadly, evenly rounded, base constricted, narrower than apex; disk moderately shining, very densely, deeply, subconfluently punctate, sides with punctures deeper, larger or subequal to discal ones; pubescence fine, long, suberect; prosternum densely, deeply punctate, punctures smaller than those at sides of pronotum; meso- and metasternum moderately coarsely, shallowly punctate, episternum of metathorax moderately densely, shallowly punctate. *Elytra* slightly more than twice as long as broad at base, narrowly explanate; surface shining, densely, moderately coarsely, slightly rugosely punctate, punctures deep, finer and separated basally, contiguous toward apex but not strongly confluent; apices broadly rounded; scutellum glabrous, shallowly concave. *Legs* with femora moderately strongly clavate, posterior pair not attaining elytral apices, shining with a metallic lustre, sparsely punctate and pubescent; apex of fifth sternite broadly, shallowly emarginate. Length, 5.5-9 mm.

Female—Antennae extending over basal one-third of elytra; prosternum shining, finely rugulose; femora less strongly clavate than in male; apex of fifth abdominal sternite narrowly rounded. Length, 6-9 mm.

Holotype male, allotype (California Academy of Sciences, Entomology), and 29 paratypes (California Insect Survey) reared (J. Powell No. 60JI) on various dates in January, May and November, 1961, from branches of *Juniperus californica* collected October 17, 1960, at DESERT SPRINGS, SAN BERNARDINO COUNTY, CALIFORNIA (J. A. Powell). Additional paratypes include eleven females and eight males reared on various dates in February, March and April, 1935, 1936 and 1950, from branches of *Juniperus cali-*

¹ Appreciation is expressed to the National Science Foundation for the support of studies of North American Cerambycidae under NSF Grant G-19959. Material utilized in the present paper was kindly made available by J. F. Gates Clarke, United States National Museum; Henry F. Howden, Canadian National Collection; J. D. Lattin, Oregon State University; H. B. Leech, California Academy of Sciences; A. T. McClay, University of California, Davis; and J. A. Powell, University of California, Berkeley.

fornica collected at Palmdale, Los Angeles County, California, by A. T. McClay.

This species has thus far been found only on the Mojave Desert of California. It may be recognized by its small size, bright blue integument, and the distinctive punctation of the pronotal disk.

***Callidium violaceipenne* Linsley and Chemsak, new species**

Male—Form small, elytra broadly explanate behind humeri; upper surface dark violaceous or bluish, underside dark reddish brown, appendages darker. *Head* coarsely, closely punctate, pubescence sparse, suberect and rather long; antennae extending to about apical one-third of elytra, segments gradually decreasing in width apically, basal segments not strongly incrassate, *Pronotum* about one and one-half, or less, times wider than long, slightly narrower than elytra at base; sides broadly, evenly rounded, base narrower than apex; disk shining, moderately coarsely, densely, confluent punctate, vague, glabrous calluses present, sides deeply, rugosely punctate, punctures subequal in size to discal ones; pubescence moderate; prosternum punctate like sides of pronotum; meso- and metasternum shallowly, transversely rugulose, episternum of metathorax densely, shallowly punctate. *Elytra* at base about twice as long as broad, broadly explanate; surface slightly shining, densely, coarsely, rugosely punctate, basal punctures smaller, costae often vague; apices obliquely rounded; scutellum glabrous, impressed medially. *Legs* with femora moderately clavate, posterior pair not attaining elytral apices, shining, without a metallic caste. *Abdomen* sparsely punctate and pubescent; apex of fifth sternite broadly, shallowly emarginate. Length, 6-10 mm.

Female—Antennae extending over basal one-third of elytra; sides of pronotum very densely, rugosely punctate, prosternum shining, shallowly, transversely rugulose; femora weakly clavate; apex of fifth abdominal sternite narrowly rounded. Length, 6.5-10 mm.

Holotype male, allotype (California Academy of Sciences, Entomology), and 22 paratypes (14 males, eight females) reared from branches of *Sequoia sempervirens* collected at HARTSOOK GROVE, HUMBOLDT COUNTY, CALIFORNIA, June 25, 1939 and April 21, 1940, by A. T. McClay (California Academy of Sciences, Entomology; California Insect Survey; and University of California, Davis).

This species is more closely related to the juniper-infesting *C. hoppingi* Linsley, of the Pacific Northwest, than to the other species associated with redwood (*Sequoia*). It differs in the smaller size and features of the pronotal punctation.

***Callidium viridocyaneum* Linsley and Chemsak, new species**

Male—Form oblong, moderate sized, elytra narrowly explanate behind humeri, subparallel; upper surface dark bluish-green, underside and appendages black to dark piceous; pubescence coarse, black. *Head* coarsely, con-

fluently punctate, moderately pubescent; antennae black, paler apically, reaching beyond middle of elytra, segments two to four robust, strongly incrassate at apices. *Pronotum* one and one-half times wider than long, slightly narrower than elytra at base; sides broadly, evenly rounded, base constricted, narrower than apex; disk slightly shining, very densely, moderately coarsely, confluent punctate, sides more finely, deeply, subrugosely punctate; pubescence moderate, suberect; prosternum less densely punctate than pronotum at sides; meso- and metasternum finely, densely punctate, finely, transversely rugulose. *Elytra* about twice as long as broad at base, narrowly explanate; surface shining, densely, coarsely, rugosely punctate, basal punctures finer, each elytron with two costae often evident basally; apices broadly rounded to suture; scutellum glabrous, deeply concave centrally. *Legs* with femora moderately strongly clavate, posterior pair not attaining elytral apices, shining, sparsely punctate and pubescent. *Abdomen* finely not closely punctate, thinly pubescent; fifth sternite broadly, shallowly emarginate at apex. Length, 6-11 mm.

Female—Antennae extending over basal one-third of elytra; prosternum shining, finely, shallowly rugulose; femora less strongly clavate; apex of fifth abdominal sternite narrowly rounded. Length, 8-11 mm.

Holotype male, allotype (California Academy of Sciences, Entomology), and 26 paratypes (21 males, 5 females) from PINE RIDGE, SHANNON COUNTY, SOUTH DAKOTA (W. S. Cook) (California Insect Survey).

This species is distinctive in the strongly incrassate basal antennal segments and dark blue-green color. The deeper discal pronotal punctures will distinguish it from the related *C. leechi* Linsley and Chemsak and *C. californicum* Casey.

***Callidium leechi* Linsley and Chemsak, new species**

Male—Form oblong, moderate sized; elytra moderately broadly explanate behind humeri, often tapering apically; upper surface dark blue, blue-green or dark blue-violet, underside dark brownish black, legs and antennae darker. *Head* moderately coarsely, densely, confluent punctate, sparsely pubescent; antennae black, apices often paler, extending beyond middle of elytra, basal segments not strongly incrassate at apices. *Pronotum* about one and one-half times, or less, wider than long, narrower than elytra at base; sides broadly, evenly rounded, base narrower than apex; disk shining, densely, contiguously, rather shallowly punctate with vague glabrous calluses present, sides more coarsely, deeply, somewhat rugosely punctate; pubescence moderate, suberect; prosternum less coarsely punctate than sides of pronotum; meso- and metasternum densely, shallowly punctate, transversely rugulose. *Elytra* about twice as long as broad at base, moderately broadly explanate, often tapering slightly apically; surface shining, densely, coarsely, rugosely punctate, basal punctures almost subequal to apical ones, each elytron with a distinct median costa and often a shorter one toward suture; apices obliquely rounded; scutellum glabrous, shallowly concave centrally. *Legs* with fem-

ora strongly clavate, posterior pair not extending beyond elytral apices, feebly shining, without a metallic cast. *Abdomen* finely, not closely punctate, thinly pubescent; fifth sternite broadly, shallowly emarginate. Length, 7-12 mm.

Female—Antennae extending over basal one-third of elytra; sides of pronotum finely, rugosely punctate; prosternum finely, shallowly rugulose; femora less strongly clavate; apex of fifth abdominal sternite narrowly rounded. Length, 10-12 mm.

Holotype male, allotype, and 55 paratypes (26 males, 29 females) (California Academy of Sciences, Entomology), from MILL VALLEY, MARIN COUNTY, CALIFORNIA, reared from *Sequoia sempervirens* by H. B. Leech; emergence dates were as follows: May 9, 1950, March 15, 1951, March 28, 1951, March 29, 1951, April 4, 1951, April 20, 1951, April 23, 1951, April 24, 1951, and January, 1957.

The moderately broadly explanate and apically tapering elytra will separate this species from *C. californicum* Casey, to which it appears to be most closely related.

Phymatodes mohavensis Linsley and Chemsak, new species

Male—Form small, subparallel; color pale-brown to brown, usually with basal one-third of elytra paler; elytra bifasciate; pubescence long, sparse, pale. *Head* densely, coarsely, subconfluently punctate, pubescence fine, sparse, erect; antennae shorter than body, segments sparsely punctate, long, erect cilia fairly numerous, apical segments densely clothed with short subdepressed hairs, second segment about one-half as long as third, third subequal to fourth. *Pronotum* slightly broader than long, sides broadly rounded, base constricted and impressed; disk moderately coarsely, densely punctate, long erect hairs abundant, sides more deeply punctate, subopaque; prosternum deeply, coarsely punctate; meso- and metasternum coarsely, shallowly punctate, pubescence moderate. *Elytra* slightly more than twice as long as broad; surface coarsely, densely, subcontiguously punctate, the punctures over basal one-third much larger than those of pronotal disk, fine, erect, pale hairs numerous; fasciae ivory-white, subglabrous, anterior pair short, transverse or a little oblique, posterior pair oblique, slanting anteriorly toward suture; apices rounded. *Legs* slender, femora strongly clavate, sparsely punctate, long, erect hairs numerous. *Abdomen* shining, sparsely pubescent and punctate; apex of fifth sternite slightly emarginate. Length, 3.5-5 mm.

Female—Antennae slightly more than one-half as long as body; apex of fifth abdominal sternite rounded. Length, 5-7 mm.

Holotype male, allotype (Canadian National Collection, Ottawa), and 16 paratypes (9 males, 7 females) (California Academy of Sciences, Entomology, and California Insect Survey) reared on July 12, 1927 (a few specimens with no date), from *Juniperus californica*, MOJAVE, KERN COUNTY, CALIFORNIA (R. Hopping).

This species is closely related to *P. nitidus* LeConte which it resembles in color, size, and by possessing similar elytral fasciae. However, the very coarse, dense punctures of the elytra and pronotum and closely punctate head of *mohavenis* differentiate it from that species.

Megacyllene robusta Linsley and Chemsak, new species

Male—Form large, robust; integument black, legs brownish red, antennae rufo-piceous; pronotum with three transverse yellow bands, the first behind anterior margin, second behind middle, third basal; elytral pattern consisting of seven yellow or white and yellow transverse bands, basal very narrow, subbasal broadest, uniting at scutellum, ante-median roundly angulate, u-shaped, meeting subbasal band at suture, not extending to lateral margins, median band broken, extending down suture from ante-median band, lateral spots joining along extreme lateral margins to subbasal band, post median consisting of two sutural dots and larger lateral segments, subapical irregularly arcuate, apical small. *Head* with vertex densely, moderately coarsely punctate, densely pubescent; antennal tubercles prominent, finely, sparsely punctate, deeply canaliculate medially, apices obtuse; antennae reaching to about apical one-fourth of elytra, spines of distal segments short, eleventh segment appendiculate, almost divided. *Pronotum* densely, moderately coarsely punctate except for minutely punctate median callus and one on each side. *Elytra* slightly over twice as long as broad, very finely, densely punctate, subsutural carina evanescent; apices obliquely truncate, angles dentate. *Legs* with posterior femora falling short of elytral apices. *Abdomen* finely, sparsely punctate, densely yellow pubescent at sides; apex of fifth sternite emarginate-truncate. Length, 21 mm.

Female—Antennae extending over basal one-third of elytra; abdomen with fifth sternite broadly rounded at apex. Length, 20-21 mm.

Holotype male and allotype from COCHISE, COCHISE COUNTY, ARIZONA, XI-1-38 (G. Anderson) (California Academy of Sciences, Entomology); one female paratype, 8 miles S.E. Rodeo, Hidalgo County, New Mexico, X-26-55 (W. Miller) (California Insect Survey).

The species may be distinguished by its large size and the lack of subsutural carinae on the elytra. It differs from *M. angulifera* (Casey) by the different elytral pattern, longer antennae of the male, dentate angles at the apices of the elytra, and differently shaped apex of the fifth abdominal sternite.

Megacyllene powersi Linsley and Chemsak, new species

Male—Form moderate sized; integument black, appendages black, except antennae and tarsi apically; pronotum with four transverse bands, the first narrow, often whitish along anterior margin, the remainder broad, yellow, coalescing at sides; elytral pattern variable, usually consisting of seven yellow transverse bands, basal narrow, subbasal broad, uniting behind scutel-

lum, ante-median angulate, V-shaped, extending to lateral margins, median band arcuate, directed anteriorly along suture, post median broad, arcuate or not, occasionally coalescing with median and/or subbasal bands to form a very broad band, subbasal and basal joined at suture, all bands joined at lateral margins by longitudinal band. *Head* with vertex moderately coarsely, not densely punctate, front and antennal tubercles very finely, sparsely punctate; antennae extending a little beyond middle of elytra, spines of distal segments short, eleventh segment slightly appendiculate. *Pronotum* densely, moderately coarsely punctate except for median callus and one on each side of disk. *Elytra* more than twice as long as broad, minutely, densely punctate, subsutural carinae prominent at apical one-half; apices obliquely truncate, slightly dentate at angles. *Legs* with posterior femora falling far short of elytral apices; apical segment of tarsi and claws brownish. *Abdomen* finely, sparsely punctate, sternites broadly yellow pubescent at sides; apex of fifth sternite broadly truncate. Length, 13-17 mm.

Female—Antennae extending over basal one-fourth of elytra; abdomen with fifth sternite rounded at apex. Length, 14-18 mm.

Holotype male and allotype from 7 MILES S.E. SHELDON, RANSOM COUNTY, NORTH DAKOTA, VIII-26-60 (J. R. Powers) (California Academy of Sciences, Entomology); 8 paratypes (4 males, 4 females), same locality, IX-3-60 (J. R. Powers) (California Insect Survey).

This is the species referred to by G. Hopping (Ann. Ent. Soc. America, 30:445, pl. 1, 1937) as *Cyllene infausta* LeConte (in part, at least). However, *infausta* LeConte was described from Georgia and is a junior synonym of *decora* (Olivier).

Structurally, *powersi* is difficult to separate from fully marked individuals of *decora*. This latter species is characterized by its tendency toward coalescence of the basal transverse bands of the elytra and usual reduction of the median group. In *powersi*, the basal bands appear to remain separated but the median and post median often unite and/or the post median and the basal ones. The smaller average size and very dark appendages of *powersi* will also help to separate the two species. *M. snowi* (Casey) differs from *powersi* by its reddish appendages and slightly different elytral pattern.